```
L13 ANSWER 1 OF 1 USPATFULL on STN
AN
       2002:243532 USPATFULL
TΙ
       Method for isomerizing halogenated aromatics
IN
       Kato, Hajime, Aichi, JAPAN
       Iwayama, Kazuyoshi, Aichi, JAPAN
       Kato, Masashi, Aichi, JAPAN
       Yamakawa, Shinobu, Aichi, JAPAN
       Okino, Hirohito, Aichi, JAPAN
PΑ
       Toray Industries, Inc. (non-U.S. corporation)
PΙ
       US 2002132723 A1
                              20020919
ΑI
      US 2001-10561
                         A1
                               20011108 (10)
RLI
      Division of Ser. No. US 1998-113587, filed on 10 Jul 1998, ABANDONED
PRAI
       JP 1997-185165 19970710
       JP 1997-335229
                         19971205
ЪΤ
      Utility
FS
      APPLICATION
       SCHNADER HARRISON SEGAL & LEWIS, LLP, 1600 MARKET STREET, SUITE 3600,
LREP
       PHILADELPHIA, PA, 19103
CLMN
      Number of Claims: 21
ECL
      Exemplary Claim: 1
DRWN
       3 Drawing Page(s)
LN.CNT 1088
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      The present invention provides a catalyst composition with a
AB
      high halogenated aromatics isomerization
      activity, a halogenated aromatic
       isomerization method using said catalyst composition,
      and a halogenated aromatics isomerization
      method capable of prolonging the life or regeneration period of the
      catalyst.
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In the present invention, a catalyst composition characterized in that the maximum diameter of secondary particles of the zeolite in the formed catalyst is 5 microns or less is used to improve the halogenated aromatics isomerization activity. Furthermore, if dissolved oxygen is decreased, the life or regeneration period of the catalyst can be prolonged.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L17 ANSWER 1 OF 5 USPATFULL on STN
AN
       2003:185578 USPATFULL
TΙ
       Preparation of high silica zeolites bound by zeolite
       and use thereof
IN
       van den Berge, Jannetje Maatje, Oostvoorne, NETHERLANDS
       Mohr, Gary David, League City, TX, UNITED STATES
       US 2003127360
PΤ
                          Α1
                               20030710
       US 6645370
                          B2
                               20031111
AΙ
       US 2002-315353
                          A1
                               20021210 (10)
       Division of Ser. No. US 2001-992783, filed on 14 Nov 2001, GRANTED, Pat.
RLI
       No. US 6517807 Continuation of Ser. No. US 1999-396842, filed on 15 Sep
       1999, ABANDONED
       US 1998-101397P
PRAI
                           19980922 (60)
DT
       Utility
FS
       APPLICATION
       ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX, 77522
LREP
CLMN
       Number of Claims: 56
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1118
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       This invention relates to a process for producing zeolite
AB
       -bound high silica zeolites and the use of the zeolite
       -bound high silica zeolite produced by the process for
       hydrocarbon conversion. The process is carried out by forming an
       extrudable paste comprising a mixture of high silica zeolite
       in the hydrogen form, water, silica, and optionally an extrusion aid,
       extruding the extrudable paste to form silica-bound high silica
       zeolite extrudates, and then converting the silica of the binder
       to a zeolite binder. The zeolite-bound high silica
       zeolite produced by the process comprises high silica
       zeolite crystals that are bound together by zeolite
       binder crystals. The zeolite-bound high silica zeolite
       finds particular application in hydrocarbon conversion processes, e.g.,
       catalytic cracking, alkylation, disproportionation of toluene,
       isomerization, and transalkylation reactions.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L17 ANSWER 2 OF 5 USPATFULL on STN
AN
       2002:214169 USPATFULL
ΤI
       Preparation of high silica zeolites bound by zeolite
       and use thereof
       van den Berge, Jannetje Maatje, Oostvoorne, NETHERLANDS
IN
       Mohr, Gary David, League City, TX, UNITED STATES
PΙ
      US 2002115555
                               20020822
                          A 1
      US 6517807
                          B2
                               20030211
      US 2001-992783
AΤ
                         A1
                               20011114 (9)
       Continuation of Ser. No. US 1999-396842, filed on 15 Sep 1999, ABANDONED
RLI
      US 1998-101397P 19980922 (60)
PRAT
DТ
      Utility
FS
      APPLICATION
      ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX, 77522
LREP
      Number of Claims: 56
CLMN
ECL
      Exemplary Claim: 1
      No Drawings
DRWN
LN.CNT 1114
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       This invention relates to a process for producing zeolite
       -bound high silica zeolites and the use of the zeolite
       -bound high silica zeolite produced by the process for
      hydrocarbon conversion. The process is carried out by forming an
       extrudable paste comprising a mixture of high silica zeolite
```

in the hydrogen form, water, silica, and optionally an extrusion aid, extruding the extrudable paste to form silica-bound high silica zeolite extrudates, and then converting the silica of the binder to a zeolite binder. The zeolite-bound high silica zeolite produced by the process comprises high silica zeolite crystals that are bound together by zeolite binder crystals. The zeolite-bound high silica zeolite finds particular application in hydrocarbon conversion processes, e.g., catalytic cracking, alkylation, disproportionation of toluene, isomerization, and transalkylation reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 5 USPATFULL on STN 2002:7119 USPATFULL AN ΤI Process for making a lube base stockform a lower molecular weight feedstock O'Rear, Dennis J., Petaluma, CA, UNITED STATES TN Harris, Thomas V., Benicia, CA, UNITED STATES Miller, Stephen J., San Francisco, CA, UNITED STATES Krug, Russell R., Novato, CA, UNITED STATES Lok, Brent K., San Francisco, CA, UNITED STATES US 2002003102 Α1 20020110 $_{
m PI}$ US 6706936 B2 20040316 US 2001-758813 A1 20010111 (9) ΑI Continuation-in-part of Ser. No. US 1999-470053, filed on 22 Dec 1999, RLI PENDING DTUtility FS APPLICATION LREP BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404 Number of Claims: 25 CLMN Exemplary Claim: 1 ECL DRWN 4 Drawing Page(s) LN.CNT 1479 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A process for making a lube base stock wherein a highly paraffinic AΒ feedstock is dehydrogenated to produce an olefinic feedstock. That olefinic feedstock is contacted with an oligomerization catalyst in an oligomerization zone to produce a product having a higher number average molecular weight than the olefinic feedstock. The product is separated into a light byproduct fraction and a heavy product fraction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L17 ANSWER 4 OF 5 USPATFULL on STN
       2001:99595 USPATFULL
ΑN
ΤI
       Process for making a lube base stock from a lower molecular weight
       feedstock using at least two oligomerization zones
       Miller, Stephen J., San Francisco, CA, United States
TN
       O'Rear, Dennis J., Petaluma, CA, United States
       Harris, Thomas V., Benicia, CA, United States
       Krug, Russell R., Novato, CA, United States
PΙ
       US 2001004972
                               20010628
                          Α1
       US 6686511
                          B2
                               20040203
       US 2001-758897
                          A1
                               20010111 (9)
ΑI
       Continuation-in-part of Ser. No. US 1999-470053, filed on 22 Dec 1999,
RLI
       PENDING
       Utility
DT
       APPLICATION
FS
       Chevron Corporation, Law Department, Patent and Licensing Unit, P.O. Box
LREP
       6006, San Ramon, CA, 94583-0806
       Number of Claims: 20
CLMN
```

The heavy product fraction comprises a lube base stock.

ECL Exemplary Claim: 1 DRWN 1 Drawing Page(s) LN.CNT 1237

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for making a lube base stock wherein an olefinic feedstock is separated into a light olefin fraction and a medium olefin fraction. The light olefin fraction is contacted with a first oligomerization catalyst in a first oligomerization zone to produce a first product. Both the medium olefin fraction and the first product are contacted with a second oligomerization catalyst in a second oligomerization zone to produce a second product. The second product is separated into a light byproduct fraction and a heavy product fraction that includes hydrocarbons in the lube base stock range.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 5 OF 5 USPATFULL on STN 90:21277 USPATFULL AN ΤI Decationized, dealuminated and stabilized L zeolite and use Raatz, Francis, Rueil Malmaison, France TN Petit, Laurent, Les Mureaux, France Marcilly, Christian, Houilles, France Bournonville, Jean-Paul, Cergy Pontoise, France Travers, Christine, Rueil Malmaison, France Dufresne, Pierre, Rueil Malmaison, France Institut Francais du Petrole, Rueil-Malmaison, France (non-U.S. PΑ corporation) ΡI US 4909924 19900320 US 1987-84726 ΑI 19870813 (7) FR 1986-11796 19860813 PRAI FR 1986-14950 19861024 FR 1986-15377 19861103 FR 1987-2969 19870303 DTUtility FS Granted Primary Examiner: Dees, Carl F. EXNAM Millen, White & Zelano LREP Number of Claims: 10 CLMN Exemplary Claim: 1,7 ECL DRWN No Drawings LN.CNT 1391 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention concerns a new decationized, dealuminated and AB stabilized zeolite of L type, characterized particularly by: a total SiO.sub.2 /Al.sub.2 O.sub.3 molar ratio of at least 8,

a potassium content lower than 2.9% by weight,

parameters a and c of the elementary mesh respectively lower than 1.836 nm and 0.754 nm,

- a nitrogen adsorption capacity at 77 K, for a partial pressure P/Ps of 0.19, higher than 11% by weight,
- a benzene adsorption capacity at 30° C., for a partial pressure P/Ps of 0.25, higher than 8.5% by weight, and
- a lattice of mesopores whose radii, measured by nitrogen adsorption-desorption at 77 K according to the BJH method, range from 0.8 nm to 20 nm.

```
L21 ANSWER 1 OF 6 USPATFULL on STN
 AN
        2003:184066 USPATFULL
 TI
        Detergent compositions containing modified alkylaryl sulfonate
        surfactants
 IN
        Kott, Kevin Lee, Loveland, OH, United States
        Scheibel, Jeffrey John, Loveland, OH, United States
        Severson, Roland George, Cincinnati, OH, United States
        Cripe, Thomas Anthony, Loveland, OH, United States
        Burckett-St. Laurent, James Charles Theophile Roger, Cincinnati, OH,
        United States
 PΑ
        The Procter & Gamble Company, Cincinnati, OH, United States (U.S.
        corporation)
 PΙ
        US 6589927
                           B1
                                20030708
        WO 2001005755 20010125
AΙ
       US 2001-980800
                                20011203 (9)
       WO 2000-US19647
                                20000719
PRAI
       US 1999-144519P
                            19990719 (60)
DT
       Utility
FS
       GRANTED
EXNAM
       Primary Examiner: Ogden, Necholus
LREP
       Taffy, Frank, Zarby, Kim W., Miller, Steven W.
CLMN
       Number of Claims: 33
       Exemplary Claim: 1
ECL
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
LN.CNT 3278
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention is in the field of processes for making
       alkylbenzenesulfonate surfactants. The processes herein include a
       combination of two essential steps, delinearization and alkylation. The
       delinearization step selected herein introduces particular types of
       limited branching into an aliphatic hydrocarbon having ten or more, but
       no more than about 16, carbon atoms. The hydrocarbon includes olefin
       having a hydrocarbon chain length suitable for detergent manufacture,
       e.g., C.sub.10-C.sub.14, or a corresponding paraffin. The second
       essential step is an alkylation step having an internal isomer
       selectivity of from 0 to no more than about 40 in which the hydrocarbon
       is used to monoalkylate benzene catalytically with an alkylation
       catalyst. Such alkylation catalysts preferably
       comprise an at least partially crystalline porous zeolite
       -containing solid, the zeolite having moderate acidity and
       intermediate pore size. Preferred alkylation catalysts include
       certain at least partially dealuminized acidic nonfluorinated
       mordenites. The processes herein further comprise sulfonating,
       neutralizing and incorporating the resulting modified
       alkylbenzenesulfonate surfactants into consumer products. The invention
       relates also to the products of the processes, including modified
       surfactants and consumer cleaning products containing them.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L21 ANSWER 2 OF 6 USPATFULL on STN
AN
       2002:243532 USPATFULL
TΙ
       Method for isomerizing halogenated aromatics
       Kato, Hajime, Aichi, JAPAN
IN
       Iwayama, Kazuyoshi, Aichi, JAPAN
       Kato, Masashi, Aichi, JAPAN
       Yamakawa, Shinobu, Aichi, JAPAN
       Okino, Hirohito, Aichi, JAPAN
PA
       Toray Industries, Inc. (non-U.S. corporation)
ΡI
       US 2002132723
                         A1
                               20020919
ΑI
       US 2001-10561
                         A1
                               20011108 (10)
      Division of Ser. No. US 1998-113587, filed on 10 Jul 1998, ABANDONED
\mathtt{RLI}
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PRAI

JP 1997-185165

19970710

19971205 JP 1997-335229

Utility DT

APPLICATION FS

SCHNADER HARRISON SEGAL & LEWIS, LLP, 1600 MARKET STREET, SUITE 3600, LREP

PHILADELPHIA, PA, 19103

Number of Claims: 21 CLMN Exemplary Claim: 1 ECL

3 Drawing Page(s) DRWN

LN.CNT 1088

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a catalyst composition AΒ with a high halogenated aromatics isomerization activity, a halogenated aromatic isomerization method using said catalyst composition, and a halogenated aromatics isomerization method capable of prolonging the life or regeneration period of the catalyst.

> In the present invention, a catalyst composition characterized in that the maximum diameter of secondary particles of the zeolite in the formed catalyst is 5 microns or less is used to improve the halogenated aromatics isomerization activity. Furthermore, if dissolved oxygen is decreased, the life or regeneration period of the catalyst can be prolonged.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 3 OF 6 USPATFULL on STN

1998:9106 USPATFULL AN

Synthetic crystalline aluminosilicate for the catalytic conversion of TΙ hydrocarbons in petrochemical processes

TN

Tissler, Arno, Tegernheim, Germany, Federal Republic of Ecolith--Zeolithe GmbH, Schwandorf, Germany, Federal Republic of PΑ (non-U.S. corporation)

19980127 US 5711869 PΙ 19961016 (8) US 1996-733018 ΑI

Division of Ser. No. US 1995-469872, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1990-549185, filed on 6 Jul 1990, RLInow abandoned And Ser. No. US 1995-422513, filed on 13 Apr 1995, now patented, Pat. No. US 5578195 which is a division of Ser. No. US 1991-725809, filed on 8 Jul 1991, now patented, Pat. No. US 5407654, issued on 18 Apr 1995

19900711 DE 1990-4022140 PRAI

Utility DTFS Granted

EXNAM Primary Examiner: Myers, Helane

Darby & Darby LREP

Number of Claims: 18 CLMN Exemplary Claim: 1 ECL

6 Drawing Figure(s); 5 Drawing Page(s) DRWN

LN.CNT 1200

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The subject invention describes a synthetic crystalline aluminosilicate of the pentasil type and method for using the same as a catalyst or a catalyst component in petrochemical processes for the catalytic conversion of hydrocarbons and their derivatives into useful organic compounds and intermediates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 4 OF 6 USPATFULL on STN

97:115204 USPATFULL AN

Synthetic crystalline aluminosilicate for the catalytic conversion of ΤI hydrocarbons in petrochemical processes

```
TN
        Tissler, Arno, Tegernheim, Germany, Federal Republic of
        Ecolith-Zeolithe GmbH I.G., Schwandorf, Germany, Federal Republic of
 PΑ
        (non-U.S. corporation)
PΤ
        US 5696043
                                 19971209
AΤ
        US 1995-469872
                                19950606 (8)
        Division of Ser. No. US 1995-422513, filed on 13 Apr 1995, now patented,
RLI
        Pat. No. US 5578195 And a continuation-in-part of Ser. No. US
        1990-549185, filed on 6 Jul 1990, now abandoned And Ser. No. US
        1991-725809, filed on 8 Jul 1991, now patented, Pat. No. US 5407654,
        issued on 18 Apr 1995
PRAI
       DE 1990-4022140
                            19900711
DT
       Utility
       Granted
EXNAM Primary Examiner: Myers, Helane
LREP
       Darby & Darby
CLMN
       Number of Claims: 16
ECL
       Exemplary Claim: 1
       6 Drawing Figure(s); 5 Drawing Page(s)
DRWN
LN.CNT 1188
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The subject invention describes a synthetic crystalline aluminosilicate
       of the pentasil type and method for using the same as a catalyst
       or a catalyst component in petrochemical processes for the
       catalytic conversion of hydrocarbons and their derivatives into useful
       organic compounds and intermediates.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 5 OF 6 USPATFULL on STN
       92:5712 USPATFULL
TI
       Dual function catalyst and isomerization therewith
IN
       Brown, deceased, Lawrence M., late of Lawrenceville, NJ, United States
       by Dorothy M. Brown, Administratrix
       Huang, Tracy J., Lawrenceville, NJ, United States
       Mobil Oil Corp., Fairfax, VA, United States (U.S. corporation)
PA
ΡI
       US 5082984
                                19920121
ΑI
       US 1991-664243
                                19910304 (7)
RLI
       Division of Ser. No. US 1990-471462, filed on 29 Jan 1990, now patented,
       Pat. No. US 5028573
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Garvin, Patrick P.; Assistant Examiner: Irzinski, E.
LREP
       McKillop, Alexander J., Speciale, Charles J., Santini, Dennis P.
CLMN
       Number of Claims: 12
       Exemplary Claim: 1
       2 Drawing Figure(s); 2 Drawing Page(s)
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       A dual function composite catalyst for isomerizing
       an isomerization feed containing an aromatic C.sub.8
       mixture of ethyl benzene and xylene, comprises (a) a crystalline
       aluminosilicate zeolite having a low acid activity as measured
       by an alpha value of from 0.02 to 11, an average crystal size of not
       more than 0.4 microns for at least 50% by weight of the crystals, a silica to alumina ratio of at least about 12, a constraint
       index of about 1 to 12, a xylene sorption capacity greater than 1 gram
       per 100 grams of zeolite, and an ortho-xylene sorption time
       for 30 percent of said capacity less than 10 minutes, said sorption
       capacity and sorption time being measured at 120° C. and a xylene
       pressure of 4.5±0.8 mm of mercury, and (b) a supported metal of Group
       VIII of the Periodic Table having a high hydrogenation/dehydrogenation
       activity to provide the catalyst with a dehydrogenation
       activity of at least 10. The catalyst has an alpha value of
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0.005 to 3.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 6 OF 6 USPATFULL on STN ΔN 91:52512 USPATFULL ΨT Dual function catalyst and isomerization therewith TN Brown, deceased, Lawrence M., late of Lawrenceville, NJ, United States by Dorothy M. Brown, administratrix Huang, Tracy J., Lawrenceville, NJ, United States Mobil Oil Corp., Fairfax, VA, United States (U.S. corporation) PΑ PΙ US 5028573 19910702 US 1990-471462 ΑI 19900129 (7) DT Utility FS Granted EXNAM Primary Examiner: Davis, Curtis R.; Assistant Examiner: Phan, Nhat LREP McKillop, Alexander J., Speciale, Charles J., Santini, Dennis P. Number of Claims: 15 CLMN ECL Exemplary Claim: 1 DRWN 2 Drawing Figure(s); 2 Drawing Page(s) LN.CNT 1706 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A dual function composite catalyst for isomerizing AΒ an isomerization feed containing an aromatic C.sub.8

A dual function composite catalyst for isomerizing an isomerization feed containing an aromatic C.sub.8 mixture of ethyl benzene and xylene, comprises (a) a crystalline aluminosilicate zeolite having a low acid activity as measured by an alpha value of from 0.02 to 11, an average crystal size of not more than 0.4 microns for at least 50% by weight of the crystals, a silica to alumina ratio of at least about 12, a constraint index of about 1 to 12, a xylene sorption capacity greater than 1 gram per 100 grams of zeolite, and an ortho-xylene sorption time for 30 percent of said capacity less than 10 minutes, said sorption capacity and sorption time being measured at 120° C. and a xylene pressure of 4.5±0.8 mm of mercury, and (b) a supported metal of Group VIII of the Periodic Table having a high hydrogenation/dehydrogenation activity to provide the catalyst with a dehydrogenation activity of at least 10. The catalyst has an alpha value of 0.005 to 3.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(FILE 'HOME' ENTERED AT 17:24:00 ON 31 MAR 2004)

	FILE 'CAPLUS, USPATFULL, CA, CAOLD' ENTERED AT 17:24:21 ON 31 MAR 2004
L1	219209 S ISOMERIZ?
L2	68141 S L1 AND CATALYST
L3	14253 S L2 AND ZEOLITE
$\mathbf{L4}$	2951 S L3 AND DIAMETER
L5	886 S L4 AND MICRON?
L6	727 S L5 AND ?AROMATIC?
L7	537 S L6 AND OXYGEN
L8	172 S L7 AND SECONDARY
L9	148 S L8 AND PARTICLE?
L10	0 S L9 AND SECONDARY ZEOLITE PARTICLE?
L11	64 S L9 AND 5 MICRON
L12	21 S L11 AND HALOGEN?
L13	1 S L12 AND DISSOLVED OXYGEN
L14	9 S L12 AND PPM
L15	6 S L14 AND ISOMERIZING
L16	5 S L15 NOT L13
L17	5 DUP REM L16 (0 DUPLICATES REMOVED)
L18	42 S L9 AND ISOMERIZING
L19	9 S L18 AND CATALYST COMPOSITION
L20	6 S L19 NOT L17
L21	6 DUP REM L20 (0 DUPLICATES REMOVED)